

AI bias: exploring discriminatory algorithmic decision-making models and the application of possible machine-centric solutions adapted from the pharmaceutical industry

Year: 2022 | Citations: 100 | Authors: L. Belenguer

Abstract

A new and unorthodox approach to deal with discriminatory bias in Artificial Intelligence is needed. As it is explored in detail, the current literature is a dichotomy with studies originating from the contrasting fields of study of either philosophy and sociology or data science and programming. It is suggested that there is a need instead for an integration of both academic approaches, and needs to be machine-centric rather than human-centric applied with a deep understanding of societal and individual prejudices. This article is a novel approach developed into a framework of action: a bias impact assessment to raise awareness of bias and why, a clear set of methodologies as shown in a table comparing with the four stages of pharmaceutical trials, and a summary flowchart. Finally, this study concludes the need for a transnational independent body with enough power to guarantee the implementation of those solutions.